Amdt. dated 07 October 2008

Reply to Office Action of 07 April 2008

Amendment to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of identifying a test strip having a set of test pads, said

method comprising:

A. impinging on illuminating said set of test pads with at least one test signal having a

wavelength;

B. detecting a set of reflected signals from said set of test pads;

C. generating an image comprised of comprising a set of reflectance values derived from

said set of reflected signals, and counting said test pad reflectance values to

determine a test pad count and determining a test strip format as a function of said

test pad count;

D. determining a test pad type from the image for at least one test pad from the set of

test pads by comparing a reflectance value associated with the test pad with a set of

reference reflectance values, wherein each of said reference reflectance values

corresponds to said wavelength and is associated with a different reference test pad

type; and

E. identifying said test strip as a function of a set of determined test pad types.

2. (Original) The method of claim 1, wherein said at least one test signal is a test signal from an

LED light source.

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3. (Original) The method of claim 1, wherein said at least one test signal is a plurality of test

signals generated from a set of LEDs, wherein each LED in said set of LEDs is configured to

transmit light at a different wavelength.

4. (Original) The method of claim 1, wherein step C includes determining a test pad reflectance

value for each test pad in said set of test pads.

5. (Canceled)

6. (Original) The method of claim 4, wherein step C includes determining a test pad order from said

test pad reflectance values.

7. (Original) The method of claim 6, wherein step D includes selecting said set of reference

reflectance values as a function of a test pad position in said test pad order.

8. (Original) The method of claim 1, wherein step B includes creating a pixel-based image of

said test strip from said reflected signals.

9. (Original) The method of claim 8, wherein said pixel-based image comprises a plurality of pixel

sets and each pixel set corresponds to a different test pad.

10. (Original) The method of claim 1, further including:

F. determining a test result for the at least one test pad as a function of the reflectance

value.

11. (Currently Amended) A method of identifying a test product having a test region, said method

comprising:

A. impinging on illuminating said set of test pads with at least one test signal having a

wavelength;

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B. detecting a set of reflected signals from said test region with a matrix of pixel-based

detectors and creating a pixel-based image of said test region, wherein said pixel-

based image comprises a plurality of pixel sets and each pixel set corresponds to a

different test area from said test region, wherein generating an image includes

counting test pad reflectance values to determine a test pad count and determining a

test strip format as a function of said test pad count;

C. determining, from said pixel-based image, a reflectance value for at least one test

area from said test region;

D. determining a test product type by comparing a reflectance value associated with the

at least one test area with a set of reference reflectance values, wherein each of said

reference reflectance values corresponds to said wavelength and is associated with a

different reference test area type; and

E. identifying said test product as a function of a set of determined test area types.

12. (Original) The method of claim 11, wherein the test product is a test strip and the test areas are

test pads on the test strip.

13. (Original) The method of claim 11, wherein the test product is a reagent cassette and the test

areas include one or more of a test line, control line and reference in the test region.

14. (Currently Amended) A system for identifying a test strip including a set of test pads, said system

comprising:

A. media having data indicative of a plurality of reference test strips and of a set of

spectral signatures, wherein each of said spectral signatures is associated with a

reference test pad type and includes a reference reflectance value at each of a

plurality of wavelengths;

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B. a set of test signal generators configured to impinge on illuminate said set of test pads

with at least one test signal having a known wavelength;

C. a matrix of pixel-based detectors, configured to detect reflected signals from said set

of test pads and to create a pixel-based image of said test strip, wherein said pixel-

based image comprises a plurality of pixel sets and each pixel set corresponds to a

different test pad on said test strip;

D. a translator configured to determine a reflectance value for at least one test pad from

said set of test pads from the pixel based image;

E. a pad typing module configured to compare said reflectance value with a set of

reference reflectance values from said set of spectral signatures for said wavelength

to determine a test pad type; and

F. an identification module, configured to identify said test strip as a function of a set of

test pad types determined by said pad typing module and to count said test pad

reflectance values to determine a test pad count and determining a test strip format as

a function of said test pad count.

15. (Currently Amended) A system for identifying a test strip including a set of test pads, said system

comprising:

A. media having data indicative of a plurality of reference test strips and of a plurality of

sets of reference reflectance values, wherein each set of reflectance values is

associated with a reference test pad type and a reference wavelengths;

B. a set of test signal generators configured to impinge on illuminate said set of test pads

with at least one test signal having a known test wavelength;

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C. one or more detectors configured to generate an image of the test strip from the

reflected signals;

D. a translator configured to determine a reflectance value from said image for at least

one test pad from said set of test pads;

E. a pad typing module configured to compare said reflectance value with said sets of

reference reflectance values for said test signal wavelength to determine a test pad

type; and

F. an identification module, configured to identify said test strip as a function of a set of

test pad types determined by said pad typing module and to count said test pad

reflectance values to determine a test pad count and determining a test strip format as

a function of said test pad count.

16. (Original) The system of claim 15, wherein said at least one test signal is a test signal from an

LED light source.

17. (Original) The system of claim 16, wherein said at least one test signal is a plurality of test

signals generated from a set of LEDs, wherein each LED in said set of LEDs is configured to

transmit light at different a wavelength.

18. (Original) The system of claim 15, wherein said translator is configured to determine a test pad

reflectance value for each of said test pads.

19. (Original) The system of claim 18, wherein said pad typing module is configured to determine a

test pad count as a function of said test pad reflectance values and said pad typing module is further

configured to determine a test strip format as a function of said test pad count.

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20. (Original) The system of claim 15, wherein said translator is configured to determine a test pad

reflectance value for each of said test pads and said pad typing module is further configured to

determine a test pad order as a function of said test pad reflectance values.

21. (Original) The system of claim 20, wherein said pad typing module is further configured to apply

a selected set of reference reflectance values as a function of a test pad position in said test pad order.

22. (Original) The system of claim 15, wherein said detectors are configured to create a pixel-based

image of said test strip from said reflected signals.

23. (Original) The system of claim 22, wherein said pixel-based image comprises a plurality of pixel

sets and each pixel set corresponds to a different test pad.

24. (Original) The system of claim 15, further comprising:

F. a test conduct module, configured to determine a test result for the at least one test

pad as a function of the reflectance value.

25. (Currently Amended) A reflectometer for identifying a test strip including a set of test pads, said

reflectometer comprising:

A. media having data indicative of a plurality of reference test strips and of a

set of spectral signatures, wherein each of said spectral signatures is

associated with a reference pad type and includes a reference reflectance

value at each of a plurality of wavelengths;

B. a set of light emitting diodes (LEDs) configured to impinge on illuminate said set of

test pads with at least one test signal having a known wavelength;

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C. one or more charge coupled device (CCD) detectors, configured to detect reflected

signals from said set of test pads and to create a pixel-based image of said test strip,

wherein said pixel-based image comprises a plurality of pixel sets and each pixel set

corresponds to a different test pad on said test strip;

D. a translator configured to determine a reflectance value for at least one test pad from

said set of test pads from the pixel-based image;

E. a pad typing module coupled to said one or more CCD detectors and configured to

compare said reflectance value with a set of reference reflectance values for said

wavelength to determine a test pad type; and

F. an identification module, configured to identify said test strip as a function of a set of

pad types determined by said pad typing module and to count said test pad reflectance

values to determine a test pad count and determining a test strip format as a function

of said test pad count.

26. (Original) The system of claim 25, further comprising:

F. a test conduct module, configured to determine a test result for said at least one test

pad as a function of the reflectance value.

27. (Original) The system of claim 25, wherein said translator is configured to determine a

reflectance value for each of said test pads.

28. (Original) The system of claim 27, wherein said pad typing module is configured to determine a

test pad count as a function of said reflectance values and is further configured to determine a test

strip format as a function of said test pad count.

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29. (Original) The system of claim 25, wherein said translator is configured to determine a

reflectance value for each of said test pads and said pad typing module is further configured to

determine a test pad order as a function of said reflectance values.

30. (Currently Amended) A system for identifying a test product including a test region comprised of

one or more test areas, said system comprising:

A. media having data indicative of a plurality of reference test products, including

reference reflectance values and reference wavelengths for each test area, wherein for

each reference wavelength there is a set of reference reflectance values;

B. a set of test signal generators configured to impinge on illuminate said test region

with at least one test signal having a test wavelength;

C. one or more detectors configured to generate an image of the test region from the

reflected signals;

D. a translator configured to determine a reflectance value from said image for at least

one test area:

E. a typing module configured to compare said reflectance value and the test wavelength

with the reference reflectance values having a reference wavelength substantially

equal to the test wavelength to determine a test area type; and

F. an identification module, configured to identify said test product as a function of a set

of test area types determined by said typing module and to count said test pad

reflectance values to determine a test pad count and determining a test strip format as

a function of said test pad count.

31. (Original) The method of claim 30, wherein the test product is a test strip and the test areas are

test pads on the test strip.

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32. (Original) The method of claim 30, wherein the test product is a reagent cassette and the test

areas include one or more of a test line, control line and reference in the test region.

33. (Currently Amended) A computer program product including computer-readable instructions

resident in a computer-readable medium configured for storage in a memory and for execution by at

least one computer processor to identify a test product having a set of test regions, said computer

program the computer-readable instructions comprising:

A. a test signal control module configured for causing a set of light sources to impinge

on illuminate a set of test regions with at least one test signal having a wavelength;

B. a detector module configured for causing a detector to detect a set of reflected signals

from said set of test regions;

C. an image generating module configured for generating an image comprising a set of

reflectance values derived from said set of reflected signals;

D. a typing module configured for determining a test region type from the image for at

least one test region from the set of test regions by comparing a reflectance value

associated with the test region with a set of reference reflectance values, wherein

each of said reference reflectance values corresponds to said wavelength and is

associated with a different reference test region type; and

E. a test product identification module configured for identifying said test product as a

function of a set of determined test region types and to count said test pad reflectance

values to determine a test pad count and determining a test strip format as a function

of said test pad count.

34. (Currently Amended) A computer program product as in claim 33, wherein the test product is a

test strip and the test regions are test pads.